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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/053,767	CHONG ET AL.
	Examiner	Art Unit	
	Mary J. Steelman	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>1/12/06, 2/7/06</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>4,7-9 and 12-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) <u>4,7-9 and 12-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 7-05) Office Action Summary Part of Paper No./Mail Date 03222006

DETAILED ACTION

1.   This Office Action is in response to RCE, Amendments, and Remarks received

1/12/2006. Per Applicant's request, claims 4, 13, and 20 have been amended. Claims 1-3, 5, 6,

10, 11, and 23 have been canceled. Claims 4, 7-9, and 12-22 are pending.

Claim Objections

2.   Claim12, line 1 recites, "The method of Claim 11...", should be –The method of Claim

4...--

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

Claims 13-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-

statutory subject matter. System claims must include devices that enable the functionality. A

suggested amendment is to include in claims 13 and 20 such devices as disclosed in the

Specification (page 13) (a control and memory unit, user input unit, display unit).

Oath/Declaration

4.   Receipt of a replacement oath is acknowledged. Prior objections to the oath are hereby

withdrawn.

Response to Arguments

5.   Applicant has argued, in substance, the following:

(A) Regarding independent claim 4, as noted on page 9, last paragraph of Remarks, Christfort

"does not teach that the application comprises a set of applications, adapted for a specific device

type."

Examiner's Response: Referencing Applicant's Specification the following citations are

relevant:

P. 14, line 20, "The presentation design focuses on the user interface aspects of multiple channels

and devices and results in a set of view templates."

Page 17, line 23, "The presentation manager 1231 is responsible for generating multi-channel

output to the device. One of the main responsibilities of this component is translating application

presentation templates to optimized device specific markup information that is supported by the

target client device."

Page 17, line 28:The presentation manager 1231 is responsible for generating multi-channel

output to the device…"

Page 18, line 10, "The presentation manager also includes an intelligent component (XHRML

View) that takes individual visual templates defined by developers for a specific session state

and dynamically generates the necessary device interfaces using predetermined rules defined in

XSL."

Page 18, line 22, "The input to the presentation manager is a presentation template.

It would appear that Applicant's invention does not produce a "set of applications" applicable for

every device, but rather enforces a Model-View-Controller paradigm (Specification, page 16;

line 26). Page 14, line 17, "Briefly, the development system 91 enforces a standard paradigm for building applications where the presentation and user interface design is separated from the business process design and the back-end integration design." Page 16, line 30, "The application manager 1230 allows the separation of the controller and view...such that details of the implementation of controllers or views may be changed without affecting the other."

It appears to Examiner that Applicant is claiming visual templates (a set of applications) where each template (application) is adapted for a specific device type. Likewise Christfort disclosed output variations [0071] to tailor output for a specific device type. [0074], "application developer may write one application with output variations (a set of applications) for each of the special conditions, which may include the specific model of the client device, the type of the client device, and broad or narrow class of the client device, the network conditions, etc.(for a specific device type)" [0075], "the middleware transformer to select an output variation or to format the output...allow the host to select the particular output that is to be provided to the end user based on the particular conditions for the particular request."

(B) As noted on page 10, 2nd paragraph, Christfort fails to disclose "translating application templates to specific markup languages associated with each of the device types." Applicants argue that using XSL style sheets to format an output for a client is not translating application templates to specific markup languages associated with each of the device types.

Examiner's Response: Examiner disagrees. Christfort: [0115], "Upon receiving the condition-independent output from the application, the middle-ware transformer determines whether the client corresponds to any of the alternative-segment tags (specific markup languages)..." [0119], "application developer to write...application code may contain alternative segment tags (specific markup languages) to customize the application's output for different devices that have varying capabilities." Christfort disclosed a developer that provides output segments (templates) translated to specific markup languages associated with each of the device types. [0157], "output segment (translating application templates to specific markup languages associated with each of the device types) relates to the markup or programming language supported by the client device to which the output is to be sent...code written in the supported programming language."

(C) As noted on page 10, last paragraph through page 11, 2nd paragraph, Christfort fails to disclose "storing threads executed by each subscriber device during execution of each application, wherein each of the executed threads are stored within a particular session which is associated with each unique identifier.

Examiner's Response: New art has been provided to reject this newly added limitation. See Freeman, USPN 6785713 B1

Freeman, col. 56, line 65-col. 57, line 37:

"The specialized server subsystem 1140 manages information regarding disconnected sessions. A disconnected session is a session that is active, but without input and output...Sessions are uniquely identified by a combination of a host ID and a session ID. The host ID is unique in the

server farm 110, and the session ID is unique to a particular server. Sessions associated with a

server 180 are also identified by the client name. Sessions associated with an application, active

and disconnected, are also identified by the name of the client (i.e., the machine or "NETBIOS"

name) connected to the application and the name of the application (e.g., <application

name>:<client name>). In one embodiment, active sessions are uniquely identified by

host ID and session ID. When a session terminates, the session ID previously associated with

the terminated session can be reused for a new session.

The specialized server subsystem 1140 records disconnected sessions in the dynamic store 240.

Each record of a disconnected session includes a host id, a session ID, a client name, the name

of the application, and other information such as the client's username and domain. The

specialized server subsystem 1140 adds a disconnected session record to the dynamic store 240

when that session is disconnected, and deletes the disconnected session record when the client

120 reconnects to the session.

FIG. 15 illustrates an embodiment of a process used by the specialized server subsystem 1140

to reconnect the client 120 to a disconnected session of that client. The client 120 sends (step

1502) to the ICA browser subsystem 720 seeking to launch an application program. The

request includes the client name and the application name. The ICA browser subsystem 720

sends (step 1504) such information to the common application subsystem 300 to perform

application name resolution, described in greater detail below. The common application

subsystem 300 forwards (step 1506) the request to a specialized server subsystem 1140, which

queries (step 1508) the dynamic store 240 in search of a record of a disconnected session that

matches the client and application names.

The search of the dynamic store 240 produces (step 1510) a pass or fail. If the search passes

because the client has a disconnected session for desired application, the specialized server

system 1140 obtains (step 1512) the address of the server identified by the host ID in the record

of the disconnected session from the dynamic store system service module 356 and returns the

address to the ICA browser subsystem 720. The ICA browser subsystem 720 returns (step

1516) the address of the disconnected server to the client 120. The format of the address

depends upon the underlying transport mechanism (e.g., IPX or TCP) for communicating with

the disconnected server from the client 120. This transport mechanism may be different from

the transport mechanism used during the disconnected session.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 4, 7, 12-16, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable

over US Patent Application Publication 2002/0138617 A1 to Christfort et al., in view of US

Patent 6,785,713 B1 to Freeman et al.

Per claim 4:

A method for executing a multi-channel application capable of operating over a plurality of

channels in a multi-channel system having a plurality of subscribers, said method comprising the

steps of:

Christfort disclosed [0095] end users (subscribers) connecting over a plurality of channels

(Internet, DSL, dial up, cable, ISDN, wirelessly, etc.) to an application that can handle responses

to various types of client devices. [0127] Output is formatted according to the needs of the client

(subscriber).

-identifying each subscriber with a unique identifier which is independent of a subscriber device

running said multi-channel application;

As an example, Christfort disclosed identifying each subscriber at [0185] & [0192],

independently of identification of ([0101] discloses 'conditions, parameters, and characteristics'

associated with a service request) type of client, device type, etc.

-wherein the multi-channel application comprises a set of applications in which each application

is adapted for a specific device type

Christfort disclosed output variations [0071] (a set of applications) to tailor output for a specific

device type (each application is adapted for a specific device type). [0074], "application

developer may write one application with output variations (a set of applications) for each of the

special conditions, which may include the specific model of the client device, the type of the

client device, and broad or narrow class of the client device, the network conditions, etc.(for a

specific device type)" [0075], "the middleware transformer to select an output variation or to

format the output…allow the host to select the particular output that is to be provided to the end

user based on the particular conditions for the particular request."

-detecting the device types associated with subscriber devices, wherein each device type is

configured to communicate over at least one of the channels, wherein each channel is established

over a particular medium;

As an example, Christfort disclosed (FIG. 1A) a host server (application manager), #110 [0066-

0071]. [0067], "in response to the request (receive requests from clients to access applications)

from user 120, host server 110 may then execute (execute in response to the requests) the

appropriate hosted application and send the resulting output to end user." See [0066] & [0095]

as related to 'multi-channel applications'. The application may communicate with various

devices using various channels of communications. As an example, Christfort disclosed [0101 -

0103] a middleware transformer associated with the host receives 'conditions and parameters'

(detect device types associated with subscriber devices), as related to the client device type, and

uses the information to transform (generate / formatted) output (communicate over at least one of

the channels) to be specific for the client device. See FIG. 4 and related text at [0163-0168].

Christfort disclosed "each channel is established over a particular medium" at [0066] where it is

pointed out that there are a variety of connections or gateways may be implemented. [0071],

"output that is tailored or customized based on parameters or conditions associated with a service

request."

-translating application templates to specific markup languages associated with each of the

device types;

Christfort: [0115], "Upon receiving the condition-independent output from the application, the

middle-ware transformer determines whether the client corresponds to any of the alternative-

segment tags (specific markup languages)..." [0119], "application developer to

write...application code may contain alternative segment tags (specific markup languages) to

customize the application's output for different devices that have varying capabilities."

Christfort disclosed a developer that provides output segments (templates) translated to specific

markup languages associated with each of the device types. [0157], "output segment (translating

application templates to specific markup languages associated with each of the device types)

relates to the markup or programming language supported by the client device to which the

output is to be sent...code written in the supported programming language."

-communicating the translated application templates to each of the subscriber devices;

Christfort: [0157], "output segment (translating application templates to specific markup

languages associated with each of the device types) relates to the markup or programming

language supported by the client device to which the output is to be sent (communicating the

translated application templates to each of the subscriber devices)...code written in the supported

programming language."

Regarding the limitations:

-storing threads executed by each subscriber device during execution of each application,

wherein each of the executed threads are stored within a particular session which is associated

with each unique identifier such that upon any of the subscribers being disconnected during a

session the subscriber is uniquely identified upon reconnection to the application;

-recalling said executed threads when the subscriber reconnects to the application following the

subscriber being disconnected;

Freeman disclosed , col. 56, line 65-col. 57, line 37:

"The specialized server subsystem 1140 manages information regarding disconnected sessions.

A disconnected session is a session that is active, but without input and output...Sessions are

uniquely identified by a combination of a host ID and a session ID. The host ID is unique in the

server farm 110, and the session ID is unique to a particular server. Sessions associated with a

server 180 are also identified by the client name. Sessions associated with an application, active

and disconnected, are also identified by the name of the client (i.e., the machine or "NETBIOS"

name) connected to the application and the name of the application (e.g., <application

name>:<client name>). In one embodiment, active sessions are uniquely identified by

host ID and session ID."

"The specialized server subsystem 1140 records disconnected sessions in the dynamic store

240. (storing threads executed by each subscriber device during execution of each application /

associated with unique identifier) Each record of a disconnected session includes a host id, a

session ID, a client name, the name of the application, and other information such as the client's

username and domain. The specialized server subsystem 1140 adds a disconnected session

record to the dynamic store 240 when that session is disconnected, (subscriber disconnected

during a session is uniquely identified upon reconnection) and deletes the disconnected session

record when the client 120 reconnects to the session. "

"FIG. 15 illustrates an embodiment of a process used by the specialized server subsystem 1140 .

to reconnect the client 120 to a disconnected session of that client (subscriber disconnected

during a session is uniquely identified upon reconnection). The client 120 sends (step 1502) to

the ICA browser subsystem 720 seeking to launch an application program. The request

includes the client name and the application name. The ICA browser subsystem 720 sends (step

1504) such information to the common application subsystem 300 to perform application name

resolution, described in greater detail below. The common application subsystem 300 forwards

(step 1506) the request to a specialized server subsystem 1140, which queries (step 1508) the

dynamic store 240 in search of a record of a disconnected session that matches the client and

application names. "

The search of the dynamic store 240 produces (step 1510) a pass or fail. If the search passes

because the client has a disconnected session for desired application, the specialized server

system 1140 obtains (step 1512) the address of the server identified by the host ID in the record

of the disconnected session from the dynamic store system service module 356 and returns the

address to the ICA browser subsystem 720 (recalling said executed threads). The ICA browser

subsystem 720 returns (step 1516) the address of the disconnected server to the client 120. The

format of the address depends upon the underlying transport mechanism (e.g., IPX or TCP) for

communicating with the disconnected server from the client 120. This transport mechanism

may be different from the transport mechanism used during the disconnected session.

-presenting to the subscriber an option to continue execution of the application from a previous

point of execution prior to the subscriber being disconnected.

Christfort disclosed at [0191] the ability to return to a previous service (continue execution from

a previous point), prior to selecting a 'done or exit' control (prior to disconnecting). Christfort

disclosed [0181] that state information is stored (journaling transactions) at an intermediary.

Until the end user selects 'done' or exit' callback information is stored in a record (if

disconnected during a session the information remains stored on the stack). Regarding the

unique identification see [0185]- end user (subscriber) and [0119]-device type. See [0191]

regarding allowing an end user to return to a previous selection.

More specifically Freeman disclosed (col. 57, line 24), ""FIG. 15 illustrates an embodiment of a

process used by the specialized server subsystem 1140 to reconnect the client 120 to a

disconnected session of that client (subscriber disconnected during a session is uniquely

identified upon reconnection). The client 120 sends (step 1502) to the ICA browser subsystem

720 seeking to launch an application program. The request includes the client name and the

application name. The ICA browser subsystem 720 sends (step 1504) such information to the

common application subsystem 300 to perform application name resolution, described in

greater detail below. The common application subsystem 300 forwards (step 1506) the request

to a specialized server subsystem 1140, which queries (step 1508) the dynamic store 240 in

search of a record of a disconnected session that matches the client and application names (to

enable to continue execution of the application from a previous point of execution prior to the

subscriber being disconnected)."

Therefore, it would have been obvious, to one of ordinary skill in the art at the time of the

invention to modify Christfort, by including specific details regarding storing and recalling

session threads, as disclosed by Freeman, because one would be motivated to resume network

interaction in the case of untimely termination of communication.

Per claim 7:

-the step of presenting to the subscriber an option to begin a new transaction.

Christfort disclosed [0096] presenting an end user with available services (option to begin a new

transaction) at login. End user may select an application (option to begin a new transaction)

associated with a service. [0067]- End user sends a request to host server to start a new session /

handle a request.

Per claim 12:

-the device types are selected from the group consisting of internet-enabled desktop systems,

wireless cellular telephones, smart telephones, PDAs mobile computers, pagers, laptops, and

voice phones.

As an example, Christfort disclosed [0066] desktop computers connected through the Internet, PDAs connected via cellular modem connections, a mobile phone (wireless cellular telephone) connected via a WAP-to-HTTP gateway. Christfort disclosed a phone [0116]. See [0123 - 0124] regarding specific code nodes corresponding to various types of devices. [0120]- WAP phone (smart phone), [0160] – pager, [0163]-laptop. Christfort disclosed [0021] that it is desirable to provide improved techniques for designing applications that more effectively work with all devices and new devices as they are invented [0159].

Per claim 13:

A system for running multi-channel applications capable of operating over a plurality of channels, the system comprising:

Christfort disclosed [0095] end users (subscribers) connecting over a plurality of channels (Internet, DSL, dial up, cable, ISDN, wirelessly, etc.) to an application that can handle responses to various types of client devices. [0127] Output is formatted according to the needs of the client (subscriber). See system at FIG. 1A.

-an application manager that is adapted to:

-run the multi-channel application

Christfort [0167-0168] as an example a service provider 440 responds to a request received and sends generic output 480 to hosting service 430 for output customization.

-receive requests from clients to access the multi-channel applications

Christfort [0164], "also includes an application server 446 for directing requests (receive

requests from clients) received by HTTP server 442 to the appropriate application (multi channel

applications)." Christfort disclosed 'multi-channel' at [0199], such as a network link 520

connected to a local network 522, an integrated services digital network card or a modem to

provide a data communication connection to a corresponding type of telephone line, a local area

network card to provide a data communication connection to a compatible LAN, wireless links,

etc.

-execute the multi-channel application in response to the requests;

Christfort [0195], "The invention is related to the use of computer system 500 for implementing

the techniques described herein. According to one embodiment of the invention, those

techniques are performed by computer system 500 in response to processor 504 executing one or

more sequences of one or more instructions..."

-wherein the multi-channel application comprises a set of applications in which each application

is adapted for a specific type of client device;

Christfort: See FIG. 4, #490 Device Specific Output. Christfort disclosed [0067] a hosted

application located on a host server (application manager), #110, which provides output in

response to a request from an end user, #130. The application is multi-channel and executes

multi-channel applications (handles communications over various connections from various

client devices) as noted in [0066].

-a presentation manager that is adapted to:

-detect client device types associated with client requests, wherein each client device type is

configured to communicate over at least one of the channels, wherein each channel is established

over a particular medium,

Christfort: [0138] – Request conditions indicate the device type of the client and influences the

output segment that is incorporated into the presentation.

-generate outputs to each of the clients, wherein the output to each client comprises the

application formatted for the detected client device type.

Christfort: [0138] , Also see rejection of limitations in claim 10 above.

Per claim 14:

-a device detection subsystem that is adapted to detect device types based on parameters of client

requests;

Christfort disclosed 'request-conditions' detected at the time a service request from an end user,

handled by the host server. Request conditions include information about the type of client,

device type, etc.

-a view executor that is adapted to generate content optimized for the detected device types.

As an example, Christfort disclosed [0076] generic output received at the hose is customized for

the mobile phone (detected device type) by a 'middleware transformer'. See FIG. 1B, #112,

middleware transformer. Middleware transformer generates content optimized for the detected

device type.

Per claim 15:

-the device types are selected from the group consisting of internet-enabled desktop systems,

wireless cellular telephones, smart telephones, PDAs, mobile computers, pagers, laptops, and

voice phones.

(See rejection of limitations as noted in claim 12 above.)

Per claim 16:

-at least one session data object, which is maintained by the system, and which is used by the

system to store client transactions during execution of an application,

Christfort disclosed [0076] a service linker, #114 for storing sessions. Additional details related

to storing sessions are at [0180-182]. 'Session data objects' are inherent, as Christfort discusses

'middleware' transformations which refer to 'object' environments.

-and to recall said client transactions upon a subscriber reconnecting to the application following

the subscriber being disconnected.

(See rejection of limitations as noted in claim 5 above.)

Per claim 20:

A system for developing, running and analyzing a multi-channel application capable of operating

over a plurality of channels, the system comprising:

Christfort disclosed a system for developing (creation), running (deployment), and analyzing

multi-channel applications capable of operating over a plurality of channels (at [0059-0060]

using an online software development kit. [0073-0074], Modified output is presented to an end

user to best match the device capabilities.

-a development module which is adapted to allow a developer to visually design the multi-

channel application;

Christfort disclosed a development kit at [0080]. A developer creates an application using the

user interface via the developer's browser (visually designs). The application is a multi-channel

application capable of operating over a plurality of channels, as alternate output segments are

included [0089], to customize the presentation according to a client device. As an example,

[0095] users may access the application via a computer over the Internet, using a dial-up line, a

DSL connection, a cable modem an ISDN connection (capable of operating over a plurality of

channels). A WAP phone may connect wirelessly using WAP-to HTTP gateway, or SMTP or

SMS.

-a runtime system which is adapted to operate the multi-channel application, wherein the multi-

channel application comprises a set of applications in which each application is adapted for a

specific type of client device, wherein the runtime system comprises:

Christfort [0089], "Each output segment in a set of output segments (set of applications) may be

specifically designed for certain devices..." See immediately above regarding the limitation of

multi channel application. Christfort disclosed such a runtime system at [0095].

-an application manager adapted to:

-run the multi-channel application,

Christfort [0095-0096], end users or customers can access the service. The end user logs into the

development website and may select the service that was just created.

-receive requests from clients to access the multi-channel application, and execute the multi-

channel application in response to the requests;

Christfort [0067], "the service that end user 130 requests (receive requests from clients to access

the multi-channel application) from user 120 may be supplied by a hosted application...In

response to the service request from end user 130, user may send a request to host server 110 to

provide end user 130 with output from the hosted application via connection that satisfies the

request....host server 110 may then execute the appropriate hosted application (execute the

multi-channel application in response to the requests) and send the resulting output to end user

130 over connection 140."

-a presentation manager adapted to:

-detect client device types associated with the client requests, wherein each client device type is configured to communicate over at least one of the channels, wherein each channel is established over a particular medium,

Christfort [0071], output is tailored or customized based on parameters or conditions associated with a service request. For example, the capabilities of the client devices used by end users may vary.

-output the application to each client device formatted for each of the detected client device types,

Christfort [0073], select the output segment formatted for each of the detected client device types.

-a data mining module which is communicatively coupled to the runtime system and which is adapted to monitor client usage of the runtime system.

As an example, Christfort disclosed 'data mining' at [0078] where tracking (data mining / monitor client usage) between services facilitates billing.

Per claim 21:

-the data mining module is adapted to determine all paths traversed by clients within the multi-channel application and to generate reports based on client usage of the runtime system.

As an example, Christfort disclosed 'data mining' at [0078] where tracking (data mining / monitor client usage) between services facilitates billing (generates reports). A module / service may call / link to a second module / service and may 'call back' (determine paths traversed by

clients) to the first module.   As another example see [0178] which discloses an intermediary

storing information related to business relationships for the purpose of calculating pay

(generating reports) owed to the designer.

Per claim 22:

-a first module adapted to allow a developer to visually design workflow for a multi-channel

application;

As an example, Christfort disclosed a visual design workflow module at [0080].

-a second module adapted to allow a developer to design views for the multi-channel application;

As an example, Christfort disclosed the development website may show views [0085] such as:

requiring a name and password, listing / choices of mobile applications, access to other services.

-a third module adapted to allow a developer to integrate data sources within the multi-channel

application.

As an example, Christfort disclosed [0077] the application may incorporate features and output

of other applications (integrate data sources), such as a map service linked to a weather

application.

8.   Claims 8, 9, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

US Patent Application Publication 2002/0138617 A1 to Christfort et al., in view of US Patent

6,785,713 B1 to Freeman et al., and further in view of US Patent 6,546,425 B1 to Hanson et al.

Per claim 8:

-receiving subscriber requests;

Christfort disclosed [0067] receiving a request from an end user, #130 (subscriber) by the host

server, #110. See FIG. 1A.

Christfort / Freeman failed to disclose details related to:

-detecting subscriber requests that are out of sequence;

-providing appropriate responses to subscriber requests that are out of sequence.

However Hanson disclosed:

Hanson: Col. 4, lines 3-7, "enables Mobile End Systems to communicate with Fixed End

Systems using continuous session type data streams even though Mobile End Systems sometimes

lose contact with their associated network interconnect...", col. 13, lines 31-33, "The Internet

Mobility Protocol engine performs reliable datagram services, sequencing, fragmentation, and

re-assembly of messages...", col. 14, lines 5-7, "Once the frame is received by the Mobility

Management Server the Internet Mobility Protocol engine reconstructs the frame if

fragmented..."

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the

invention, to modify Christfort / Freeman, to include details related to detecting and handling

sequencing errors as disclosed by Hanson because correct sequencing of communication packets

is a well known part of handling network communications, necessary for reliable transmissions.

Christfort / Freeman had already suggested various communication / transmission types

[Christfort - 0164] (correct sequencing of requests) are handled by a server, FIG. 4, #442.

Hanson disclosed (col. 2, lines 41-44) the need to enable network application to run reliably.

Per claim 9:

Christfort failed to disclose:

-tracking the sequence number of each request by use of a counter variable.

However Hanson provided details:

Hanson: Col. 13, lines 31-33, "The Internet Mobility Protocol engine performs reliable datagram

services, sequencing, fragmentation, and re-assembly of messages...", col. 14, lines 5-7, "Once

the frame is received by the Mobility Management Server the Internet Mobility Protocol engine

reconstructs the frame if fragmented...", col. 21, line 42, "Sequence numbers are used to insure

ordered delivery of data..."

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the

invention, to modify Christfort / Freeman, to include details related to detecting and handling

sequencing errors as disclosed by Hanson because correct sequencing of communication packets

is a well known part of handling network communications, necessary for reliable transmissions.

Christfort / Freeman had already suggested various communication / transmission types

[Christfort - 0164] (correct sequencing of requests) are handled by a server, FIG. 4, #442.

Hanson disclosed (col. 2, lines 41-44) the need to enable network application to run reliably.

Per claim 17:

-means for managing out of sequence client requests.

(See rejection of limitations as noted in claim 8 above.)

Per claim 18:

-the means for managing out of sequence client requests is adapted to receive client requests,

detect client requests that are out of sequence, and provide appropriate responses to out of

sequence client requests.

(See rejection of limitations as noted in claim 8 above.)

Per claim 19:

-means for determining whether a client request for a state in an application must be authorized.

Christfort disclosed [0085] that an application may be controlled by requiring a name and

password.

Conclusion

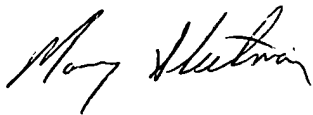9.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (571) 272-3704. The examiner can normally be reached Monday through Thursday, from 7:00 AM to 5:30 PM If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached at (571) 272-3708. The fax phone number for the organization where this application or proceeding is assigned: 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mary Steelman

03/27/2006